

35 U.S.C. §102(b) over Kawakami et al., U.S. Patent No. 5,702,845 (hereinafter: Kawakami), and under 35 U.S.C. § 103(a) over Kawakami, alone, or in combination with Takami et al., U.S. Patent No. 5,795,678, or Tamaki et al., U.S. Patent No. 5,698,341, are respectfully requested. Kawakami is insufficient to support the rejections for the reasons explained below. The undersigned notes that the following explanation of the insufficiencies of Kawakami to support the rejections was given to the Examiner, Mr. Mercado, during a telephone interview with the undersigned on November 20, 2002. Mr. Mercado agreed to reconsider the rejections.

The rejections in the Final Action are based on a belief of the Office that Kawakami discloses an active material that includes a first carbon material [104] (core) and second carbon material [100] (coating) as shown in Fig. 3, where the second carbon material contains boron. The Office is relying on the description in Col. 8, lines 27-31, of Kawakami as teaching that the core material [104] of the active material shown in Fig. 3 can be carbon. (See page 5, third paragraph, of the Action).

Applicants respectfully submit that the Office's interpretation of the description in Col. 8, lines 27-31, of Kawakami is not correct. Kawakami in Col. 8, lines 27-31, describes preferred examples of an auxiliary conductive material. *le bon*
The auxiliary conductive material described in Col. 8,, however, is not the conductive material [104] described in Col. 4, line 66, to Col. 5, line 1, that can be used to fill the hollow section of the porous hollow structure of Kawakami. The auxiliary conductive material is a separate material that can be combined (mixed) with the porous hollow active material to prepare an electrode. This is clear from the description in Col. 5, lines 14-28, that the positive or negative electrode [204] includes an active material layer [203] for the electrode that is "preferably formed by adding an auxiliary conductive material" into a binder when the conductivity of the porous hollow active material is too low. (See also Col. 8, lines 20-24, which describes the first step in the preparation of the positive electrode as being the mixing of the porous hollow active material, the binder and, optionally, the auxiliary conductive material, and Col. 8, line 65, to Col. 9, line

3, which includes a similar description relating to the preparation of the negative electrode).

*for
Rejection*

The only descriptions relating to conductive material [104] are in Col. 5, lines 40-43, which describes the use of an aqueous transition metal salt solution containing a conductive powder such as metal powder to prepare "the above-mentioned emulsion", i.e., the emulsion used to prepare porous hollow structured lithium-transition metal oxide and in Example 2 which describes the use of nickel powder in the preparation of a porous hollow lithium-manganese oxide powder. Conductive materials other than metal powders are not described and nothing is disclosed in Kawakami to suggest that the materials used as the auxiliary conductive material can also be used as the conductive material [104].

Moreover, as noted above, the use of a conductive material is described only with respect to the preparation of porous hollow structured lithium-transition metal oxide. The use of a conductive material in conjunction with preparation of a porous hollow carbon is not described and does not appear possible. The methods of preparing a porous hollow structure using carbon as the active

material described in Col. 6, line 10, to Col. 7, line 19, are limited to spinning and calcining a hollow polymer fiber (Col. 6, lines 10-18); the carbonization of the trachea and tracheid of plants (Col. 6, lines 19-26); use of an emulsion of an organic polymer in which the emulsion can include an aqueous solution in which an inorganic compound is dissolved (Col. 6, lines 27-35) and calcination of a mixture of a raw polymer with an element or elements which is readily decomposed during calcination (Col. 6, lines 64-67).

Thus, Kawakami does not disclose a carbon material comprising a first carbon material serving as an inner core particle having an outer surface, and a coating of a second carbon material on said outer surface of the first carbon material, the second carbon material containing boron, or a carbon material serving as an inner core particle having an outer surface, and a coating of a second carbon material on said outer surface of the first carbon material, the second carbon material containing boron and nitrogen; an electrode containing the carbon material as an active material or a nonaqueous electrolyte secondary cell comprising a negative

electrode containing the carbon material as an active material, and is insufficient to support a rejection for anticipation under 35 U.S.C. § 102. The 35 U.S.C. § 103(a) rejections rely on Kawakami as a primary reference and, in view of the insufficiencies of Kawakami explained above, are also not supported.

Removal of the 35 U.S.C. § 102 and 35 U.S.C. § 103(a) rejections is in order and is requested.

Regarding the objection to the drawings under 37 C.F.R. §1.83(a), submitted herewith is a proposed drawing of the carbon material of the present invention. The specification has been amended above to describe the drawing.

The foregoing is believed to be a complete and proper response to the Office Action dated July 24, 2002, and is believed to place this application in condition for allowance. If, however, minor issues remain that can be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number indicated below.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of

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RESPONSE UNDER 37 C.F.R. § 1.116

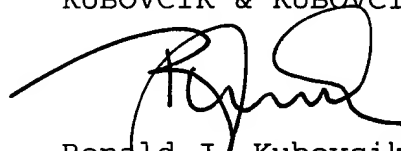
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time. The fee for any such extension may be charged to our Deposit Account No. 111833.

In the event any additional fees are required, please also charge our Deposit Account No. 111833.

Respectfully submitted,

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